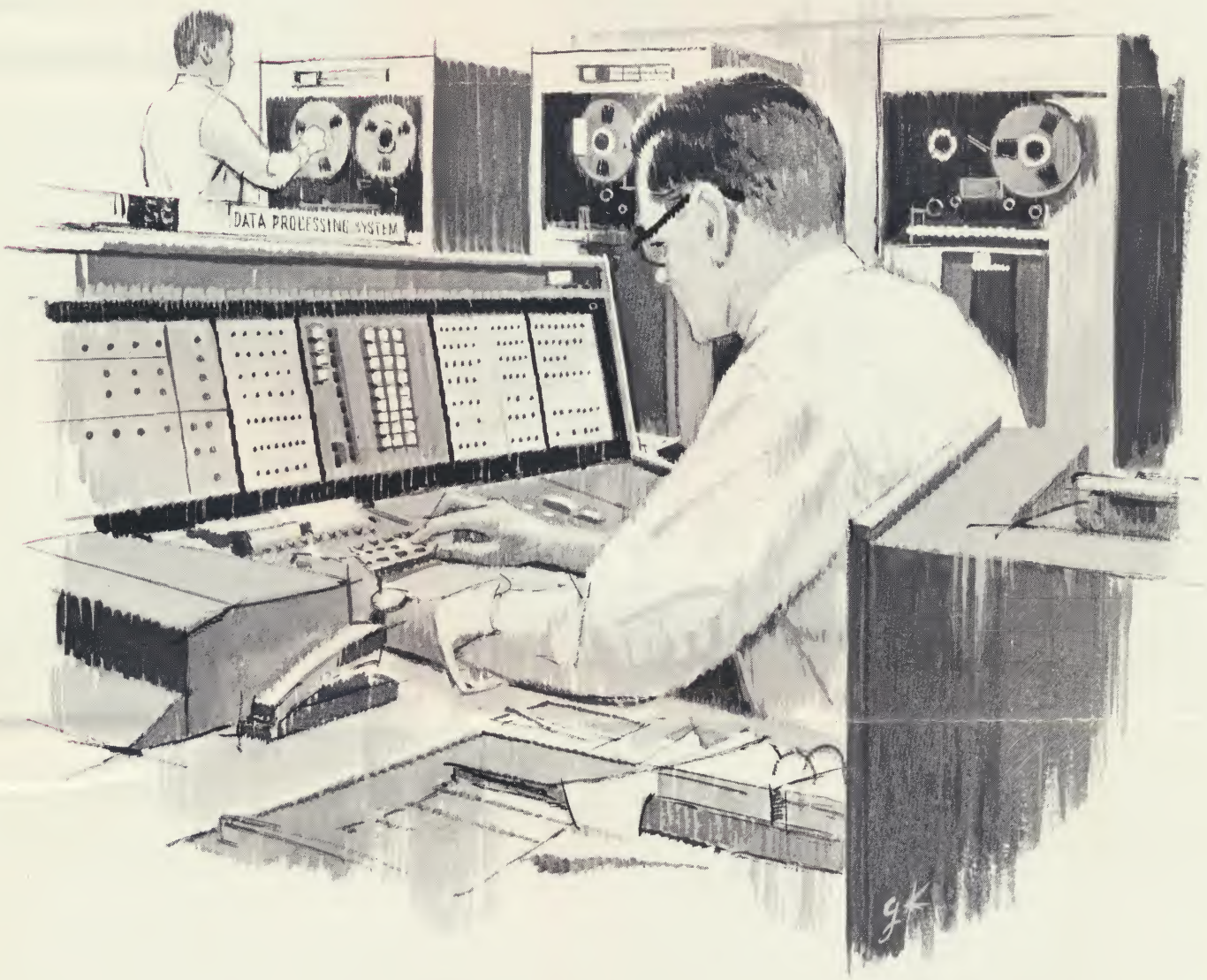
burning facts

PUBLISHED IN THE INTEREST OF BETTER RECORD PROTECTION BY SAFE MANUFACTURES NATIONAL ASSOCIATION, INCORPORATED

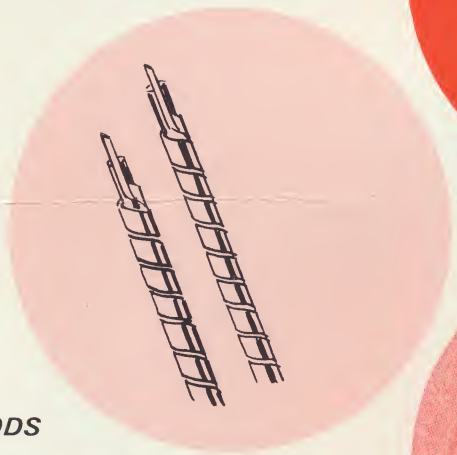


RECORDS PROTECTION IN THE AGE OF E D P

MAGNETIC TAPES • MICROFILM • DISKS • DRUMS • MAGNETIC CARDS • RODS AND OTHER MEDIA . . .

MAGNETIC TAPES

MAGNETIC CARDS



RODS

MICROFICHE

DRUMS

DISKS

MICROFILM

and other media...

THE NEED FOR ADEQUATE PROTECTION...

There are more than 22,000 computers in use today. Yet, the majority of them have less-than-adequate record protection storage facilities.

Business record protection that once involved only paper documents or punched cards has been broadened by the use of inflammable, highly perishable, magnetic tapes and cards, microfilm, disk packs, drums and similar media. Today, the problem of adequately protecting such records is highly complex. It is no wonder the average businessman confuses the requirements for the safety of these records with that needed for paper business records.

Since the introduction of electronics to business record keeping, massive amounts of data formerly maintained in document form now require only a fraction of storage space. Magnetic tape, for example, is highly vulnerable to destruction by fire, moisture, steam and explosion, yet only a few reels are equivalent to the records contained in many standard filing cabinets. Many companies could not exist if these tapes were destroyed. Tapes in this vital category include programming tapes, audit trail or master tapes, current transaction tapes and even unused disk packs that cost as much as $500 each. Their protection is essential to a company's well-being. Herein lies the problem for the businessman — how to adequately protect perishable external memory devices in the age of EDP.

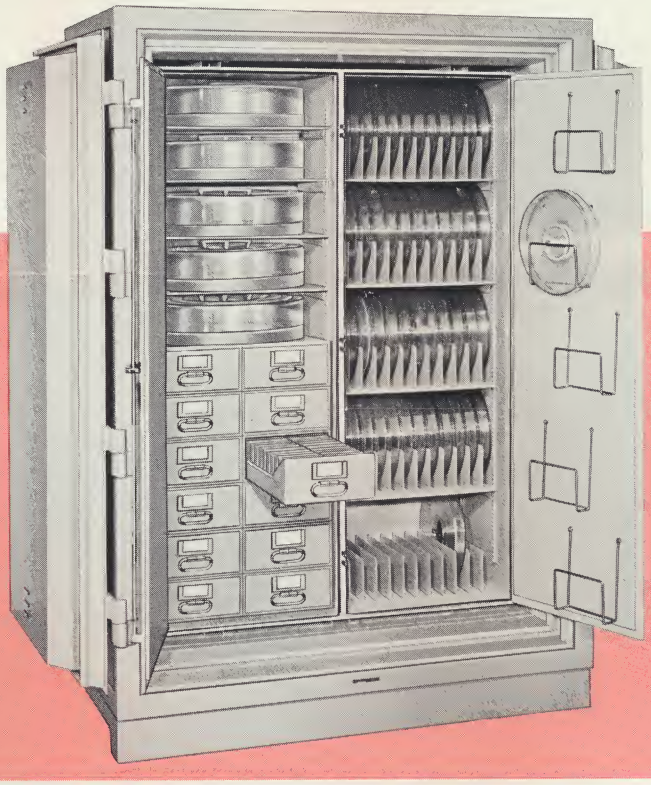
The most graphic lesson learned by business and government was the 1959 Pentagon fire that destroyed 7,000 reels of computer tape stored in supposedly fire-resistive facilities. Special EDP-type record protection equipment could have prevented this staggering loss.

According to the National Board of Fire Underwriters, fire still represents the key threat to record protection. Across the country, fire losses pass the billion dollar mark annually, and continue to grow.

Fire isn't the only concern, however, in providing adequate record protection for highly vulnerable EDP-data storage media. Moisture is as destructive as fire, experience has shown. Excessive moisture in the air has a peculiar effect on external memory devices and is as destructive as fire in some instances. Most computer installations require strict temperature and moisture control, but these precautions are useless in the event of sprinkler damage or water damage from fire fighting activities, and these same precautions are all too often overlooked as far as record storage facilities are concerned.

Increased air traffic, ordinary use of chemicals and gases in business, and even war pose threats to the security of records. All these factors should be taken into account when considering adequate record protection.

Four-Hour Classification
Free Standing Tape Safe,
Including Specially Designed
Inner Repository



Door For Tape Storage Vault
With Inner Liner Repository

WHAT CONSTITUTES MAXIMUM PROTECTION...

Record protection from fire, and other causes requires a variety of storage techniques. Standard fire discipline is important — no smoking around computer installations, clearing combustible materials from record storage areas, keeping vaults doors closed when not in use, and keeping air conditioning ducts at computer centers clean and greaseless. For example, the fire in the Pentagon is believed to have been spread partly through air conditioning ducts. Further, record storage areas should be equipped with adequate alarms and proper fire extinguishers.

THE TAPE SAFE...

The most important of all safety measures, however, is the use of record safes designed specifically for highly inflammable tapes, disk, drums, cards and other EDP media. In the event of fire, these unique safes will keep interior temperatures below 150°F. — the point at which most magnetic tapes, for example begin to deteriorate. (This is a general figure according to tape and equipment manufacturers.) These safes are the ultimate in record protection. Designed and built to the highest industry standard, they are the only protection EDP records have against damage from fire, smoke, moisture and explosions. Only the Safe Manufacturers National Association issues a Date Processing Safe label based on performance tests.

THE TAPE STORAGE VAULT...

Some large computer centers have storage vaults which are room-size. They can be built with the same protective feature as the free-standing tape safe. Such vaults are designed to meet a 6-hour, 4-hour or 2-hour rating established by the Safe Manufacturers National Association and the Underwriters' Laboratories, Inc. However, for minimum record protection, the SMNA recommends a 6-hour, or 4-hour vault (with an inner liner repository of the type used in tape safes). The inner liner is essential for protecting computer records against damage from moisture and humidity.

The vault door, floor, walls, and ceiling structure should all have the same ratings — a weak link in any of these structural components will weaken the basic protective features of the vault. Like the free standing tape safe, large vaults should have insulated vault doors bearing the SMNA label.

EVALUATING RECORDS TO ASSURE THEM ADEQUATE PROTECTION

An intelligent approach to the problem of record protection involves a recognition of the value of records, the hazards to which they are exposed, and the relative merits of the protective methods available. In a typical company, records are generally classified as Vital, Important, or Useful.

In the Vital classification are included: records which are irreplaceable; records a reproduction of which does not have the same value as an original; records needed to recover promptly monies with which to replace buildings and equipment, raw materials, finished goods and work in process; and records needed to avoid delay in restoration of production, sales and service.

INCLUDED IN THIS CLASS ARE:

- property plans
- costs and appraisals
- inventories of factory and office equipment
- inventories of finished goods and goods in process
- all original books of account and supporting papers
- independent audit reports
- tax returns
- accounts receivable
- accounts payable
- engineering records
- stock transfer and bond records
- records required by law (social security records, wage and hour records, government-contract-cost records, etc.)
- charters
- franchises
- deeds
- minutes of directors' meetings
- major contracts

These, and other such records are considered Vital. They are absolutely necessary to a company's continued operation. Their destruction would represent a loss of many man-years of work and make it impossible to process other records. Their reconstruction would be extremely costly, if not impossible when lost in a fire or other casualty. If lost they frequently mean the financial failure of the company.

(Note: Some of the above records are needed in their original form).

Important records include those records a reproduction of which could be obtained only at considerable expense and labor, or only after considerable delay. Most operating and statistical records belong in this class. This classification may include minor contracts, customers' credit files, sales records, design in process of development, records of experiments in progress, and others. Generally, such information is on current transaction computer tapes. The task of reconstructing these records would be costly and impossible if the punch cards are also destroyed.

Scratch records, generally categorized as Useful, are created on a daily basis from punch cards and contain data in no particular sequence. These records are used for the creation of current transaction records. Records, whose safety is related to their high initial cost should be protected, also. Furthermore, if a company's inventory of new, unused tapes is high, their loss would represent a correspondingly high financial loss to the company.

According to statistics, 43 per cent of companies that lose their records by fire do not resume business or are out of business within six months if their records are not adequately protected.

DUPLICATION OF RECORDS

One method employed by some firms to reduce fire risks is off-premise storage. This split-risk technique is intended to permit easy reconstruction of working records in the event of fire or other casualty.

This form of protection can be expensive when transportation and other costs of maintaining two sets of records are added to the initial investment.

Point-of-use protection is still the most practical means of safeguarding these valuable records.

STANDARDS

SMNA requires any member using its label to furnish an adequate performance test based on the American Standard Time—Temperature Curve developed by the American Standards Association.

Time and temperature are the two principal factors which contribute to fire damage. The American Time—Temperature Curve is the standard "measuring stick" used to determine the relationship between the length of time a fire burns and the temperature which develops in the fire. The Curve is used as the basis for judging the fire-endurance properties of all SMNA-labeled safes, vault doors, and other equipment, including EDP record storage equipment.

HOW SAFE IS YOUR DATA?

All business today is built on highly perishable records. Yet such records are the most vulnerable assets a company has. If there is any doubt about adequate protection — whether it concerns the safety of paper records or of any type of EDP records — the expert should be called in for consultation.

The member companies of the Safe Manufacturers National Association are technically equipped to counsel and advise on all aspects of safe and records protection equipment. In a true sense, they are the major guardians of the national wealth. Their advice and counsel may save a company's life.

SAFE MANUFACTURES NATIONAL ASSOCIATION, INCORPORATED 366 MADISON AVENUE, NEW YORK, N.Y. 10017

SAFE "SAFETY CHECK"

The primary function of a safe is to protect its contents from fire. Yet over half of the safes in use may not provide fire protection according to the National Fire Protection Association survey. Most of these "questionable" safes are either old or have old-fashioned construction. Listed below are several check points to help you quickly establish the safety status of your safe.

Place an "X" in box at right if your safe answers description.

1. Made before 1917. (In 1917, U.L. set standards for safes and established testing procedures.) ☐

2. Does not carry an Underwriters Laboratories and/or Safe Manufacturers National Association fire-resistance label. (U.L. and SMNA labels indicate safe meets minimum standards.) ☐

3. Door and body jambs have step construction. (Old-type construction features a series of steps. This allows heat to funnel in.) ☐

4. Has heavy iron shell or cast-iron door and body jambs. (Iron quickly conducts heat to interior; cast-iron can shatter on impact.) ☐

5. Has a steel inner door. (Old-type construction) ☐

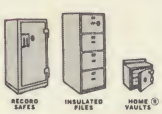
6. Has shelves, drawers, etc., made of wood. (Old-type construction) ☐

7. Has carpeting on floor. (Old-type construction) ☐

8. Has ornate door decoration. (Gold leaf, painted scrolls, etc., usually indicate safe was made at turn of century.) ☐

If you have checked one or more of the above points, chances are your safe is untrustworthy and provides "uncertain" fire protection. Only a fire can tell for sure and then it may be too late. Replace this safe with a modern Meilink safe. See the yellow pages under "Safes" for Meilink dealer.

Another service to business and industry from



MEILINK STEEL SAFE COMPANY

Box 2567 • Toledo, Ohio 43606

RECORD PROTECTION PRODUCTS SINCE 1899